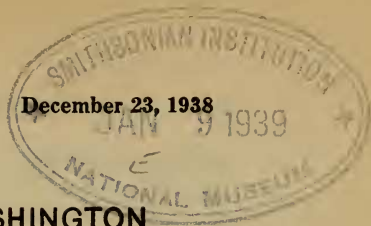


December 23, 1938

PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON



TWO NEW POCKET MICE, GENUS *PEROGNATHUS*,
FROM WEST-CENTRAL CALIFORNIA.

BY JACK C. VON BLOEKER, JR.

A study of the *californicus* group of pocket mice, based chiefly on materials in the California Museum of Vertebrate Zoology and supplemented by specimens generously loaned by Mr. O. P. Silliman, the California Academy of Sciences, and the Los Angeles Museum of History, Science and Art, has revealed the existence of two hitherto unrecognized subspecies inhabiting the west-central portion of California. Dr. Seth B. Benson, of the Museum of Vertebrate Zoology, has also studied most of this same material and is agreed with the writer in the opinion that the forms herein described merit racial recognition. The two races may be known and diagnosed as follows:

Perognathus californicus bensoni, subsp. nov.

BENSON POCKET MOUSE.

Type.—♂ subadult, skin and skull, no. 81579, Museum of Vertebrate Zoology, from Stonewall Creek, 1300 feet altitude, six and three-tenths miles northeast of Soledad, Monterey County, California, June 16, 1937, collected by Jack C. von Bloeker, Jr., orig. no. 7771.

Distribution.—Gabilan-Diablo Range from Herrero Canyon, Merced County, south through San Benito, eastern Monterey and western Fresno counties onto Carrizo Plains, San Luis Obispo County. Altitudinal range extends from 200 feet up at least to 4400 feet.

Diagnosis.—A medium-sized (see measurements), pale-colored race of the *californicus* group of pocket mice; skull short and broad, with widely inflated cranium and large smoothly contoured mastoid bullae.

Comparisons.—Compared with *Perognathus californicus californicus*, about equal in external measurements, color paler; skull broader, with wider and more inflated cranium; mastoid bullae larger and extending farther posteriorly. Compared with *Perognathus californicus dispar*, total length and tail length about equal, hind foot averages smaller and ear averages larger; color lighter; skull shorter and broader, cranium more widely inflated in parietal region; mastoid bullae longer and projecting

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farther posteriorly. Compared with *Perognathus californicus ochrus*, externally larger throughout; color averages slightly darker; skull longer and broader posteriorly; mastoid bullae larger, extending farther posteriorly.

Color (using color terms from Ridgway, *Color Standards and Color Nomenclature*, 1912).—Type: Dorsal hairs with basal portions pale neutral gray, broad subterminal bands pale ochraceous buff, terminal portions black; hairs of lateral stripes pale neutral gray basally, broadly tipped with light pinkish cinnamon; ventral body hairs and hairs of upper surface of feet and ventral surface of tail entirely white; hairs of dorsal tail stripe and at base of vibrissae mummy brown; hairs on upper (internal) rim of ear whitish.

Measurements (in millimeters).—Averages and extremes of ten adults and subadults (5 males and 5 females), paratypes: Total length, 203 (197–212); tail, 111 (103–117); head and body, 92 (86–99); hind foot, 25 (24–26); ear, from notch, 12 (11–13). Skull: Basilar length, 23.3 (22.0–23.8); greatest length, 26.7 (25.2–27.1); fronto-nasal length, 17.8 (17.2–18.4); nasal length, 10.0 (9.8–10.2); greatest width across mastoids, 13.8 (13.6–14.0); width across mastoids behind external auditory meatus, 13.2 (13.1–13.3); greatest length of mastoids, 9.8 (9.7–9.9); distance between stylomastoid foramina, 10.5 (10.3–10.7); interorbital breadth, 7.0 (6.9–7.1); interparietal width, 8.8 (8.7–8.9); interparietal length, 4.2 (4.1–4.3); alveolar length of maxillary tooth row, 4.0 (3.9–4.1).

Specimens examined.—Unless otherwise indicated, specimens are in the Museum of Vertebrate Zoology. One hundred and fifty-one, from the following localities in California: MERCED COUNTY: Sweeney's Ranch, 1200 feet, Herrero Canyon, 22 miles south of Los Baños, 13. STANISLAUS COUNTY: Ten miles west of Gustine (Merced Co.), 3. SAN BENITO COUNTY: Cook's P. O., 1300 feet, Bear Valley, 11; Butt's Ranch, 3000 feet, 5 miles north-northeast of San Benito, 4; six miles east-southeast of San Benito, 1600 feet, 17; two miles north-northeast of New Idria, 1900 feet, 5; one mile south of New Idria, 3700 feet, 2; Laguna Ranch, 4000 feet, 4 miles south of Hernandez, 3; one mile southeast of summit of San Benito Mountain, 4400 feet, 2. MONTEREY COUNTY: Stonewall Creek, 1300 feet, 6.3 miles northeast of Soledad, 13¹; mouth of Stonewall Creek, 300 feet, 4 miles northeast of Soledad, 2²; east base of Sierra de Salinas, 250 feet, 2½ miles west of Soledad Mission, 1²; Paraiso Springs, 1400 feet, Sierra de Salinas, 14²; Abbott's Ranch, 670 feet, Arroyo Seco, 1; Jorgensen Ranch, 1000 feet, Arroyo Seco, 4²; mouth of Vaqueros Canyon, 200 feet, 7²; San Lorenzo River, 1500 feet, Peachtree Valley, 2; Lewis Creek, 1750 feet, Diablo Range, 5²; Priest Valley, 2500 feet, Diablo Range, 4²; Jolon, 1100 feet, 1³; San Ardo, 450 feet, Salinas Valley, 6²; Salinas Valley, 500 feet, 5 miles south of San Ardo, 1². FRESNO COUNTY: Waltham Creek, 1850 feet, 4½ miles southeast of Priest Valley, 7. SAN LUIS OBISPO COUNTY: Nacimiento River, 1000 feet, Santa Lucia Mountains, 1²; San Diego Joe's

¹ Eight in O. P. Silliman collection.

² O. P. Silliman collection.

³ Los Angeles Museum.

(=Santiago Springs), 2600 feet, 3; Carrizo Plains, 2000 feet, 7 miles south-east of Simmler, 2; Santa Margarita, 996 feet, 17.

***Perognathus californicus marinensis*, subsp. nov.**

MARINA POCKET MOUSE.

Type.—♂ adult, skin and skull, no. 81550, Museum of Vertebrate Zoology, from Indian Harbor, 50 feet altitude, one and one-half miles south of Marina, Monterey County, California, May 27, 1937, collected by Jack C. von Bloeker, Jr., orig. no. 7496.

Distribution.—In so far as known, occurs throughout the narrow humid coastal belt of the Pacific drainage slope of the Santa Cruz and Santa Lucia Mountains, California, from Bear Creek, Santa Cruz County, south at least to Morrow Bay, San Luis Obispo County. Ranges altitudinally from near sea-level up at least to 4600 feet.

Diagnosis.—A medium-sized (see measurements), long-tailed, darkly colored pocket mouse of the *californicus* group; skull long and narrow, with somewhat flattened cranium and long, narrow mastoid bullae.

Comparisons.—Compared with *Perognathus californicus californicus*, head and body length and tail length about equal, hind foot smaller, ear larger; color much darker; skull longer and relatively narrower, with more flattened cranium; mastoid bullae longer and narrower. Compared with *Perognathus californicus dispar*, total length and tail averages shorter, head and body length averages longer, ear much longer; color darker; skull longer, with more flattened cranium and longer mastoid bullae. Compared with *Perognathus californicus bensoni*, total length and tail averages shorter, head and body length and length of hind foot about equal, ear averages longer; skull actually and relatively longer and narrower, with much more flattened cranium and longer, narrower mastoid bullae; color darker.

Color.—Type: Dorsal hairs with basal portions neutral gray, narrow subterminal bands pinkish cinnamon, broadly tipped with black; hairs of lateral stripe neutral gray basally, broadly tipped with pinkish cinnamon; hairs of ventral surface of body and tail entirely white; hairs of upper surfaces of feet pale pinkish buff; hairs of dorsal tail stripe, at base of vibrissae, and on upper (internal) rim of ear bone brown.

Measurements.—Averages and extremes of twelve adults and subadults (7 males and 5 females), paratypes: Total length, 200 (197–205); tail, 108 (101–112); head and body, 92 (89–94); hind foot, 25 (24–26); ear, from notch, 13 (12–14). Skull: Basilar length, 24.0 (23.4–24.3); greatest length, 28.2 (27.8–29.0); fronto-nasal length, 19.0 (18.6–19.4); nasal length, 11.1 (10.9–11.3); greatest width across mastoids, 13.4 (13.3–13.5); width across mastoids behind external auditory meatus, 12.8 (12.5–13.0); greatest length of mastoids, 10.5 (10.2–10.7); distance between stylomastoid foramina, 10.8 (10.6–11.1); interorbital breadth, 6.7 (6.5–6.9); interparietal width, 8.4 (8.1–8.5); interparietal length, 4.0 (3.8–4.1); alveolar length of maxillary tooth row, 4.2 (3.9–4.4).

Specimens examined.—Seventy-seven, from the following localities in California: SANTA CRUZ COUNTY: Bear Creek, 650 feet, 2–4½ miles north-

east of Boulder Creek, 9.⁴ SANTA CLARA COUNTY: Black Mountain, 4. SAN BENITO COUNTY: north end of Gabilan Mountains, 500 feet, 3½ miles west of San Juan Bautista, 2.⁴ MONTEREY COUNTY: Strawberry Canyon, 200–500 feet, 8⁴; Indian Harbor, 50–100 feet, 1½ miles south of Marina, 11⁵; Salinas Valley, 2 miles south of mouth of Salinas River, 1; Seaside, 1; Del Monte, 1; Monterey, 7⁶; mouth of El Toro Canyon, 100 feet, 2⁴; North Fork, Little Sur River, 2⁷; Big Sur River, 1; Partington Point Canyon, 3⁷; North Fork, Big Creek, 1⁷; Lime Kiln Creek, 100–250 feet, Santa Lucia Mountains, 4⁴; Nacimiento River, 2000 feet, Santa Lucia Mountains, 2⁴; Willow Creek, 1⁷; Santa Lucia Mountains, 3000 feet, 1¼ miles south of Chalk Peak, 9. SAN LUIS OBISPO COUNTY: San Carpoforo Creek, 7 miles north of Piedras Blancas, 6; four and one-half miles south of Morro, 2.

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⁴ O. P. Silliman collection.

⁵ Ten in O. P. Silliman collection.

⁶ Two in California Academy of Sciences.

⁷ California Academy of Sciences.